

INTER OFFICE MEMORANDUM

THE METROPOLITAN
GREATER

STRICT OF

DEPARTMENT: RESEARCH

1984
Monitoring

DATE: March 8, 1984

TO: Mr. Frank Dalton
Chief Engineer

FROM: Cecil Lue-Hing

SUBJECT: City of Chicago, 103rd Street and Doty Avenue Site
Results of Monitoring Well Sampling for First Quarter
1984

Samples were taken from the monitoring wells at the 103rd Street and Doty Avenue site on January 26 for the first quarter of 1984 well water sampling requirement as specified by IEPA.

The analytical results are reported on forms provided by IEPA. Well locations are shown on Figure 1. This site is identified by IEPA as location No. 03160011.

Also included are analyses of all sludge delivered to the Doty site through 1983. Table 1 contains quarterly mean analysis of sludge delivered in 1982, and Table 2 contains quarterly mean analysis of sludge delivered in 1983.

This report should be directed to Mr. Macaitis for inclusion in reports to IEPA for this site.

Cecil Lue-Hing

Cecil Lue-Hing
Director
Research and Development

CLH:JG:ns

Attachment

EPA Region 5 Records Ctr.



300965

THE METROPOLITAN SANITARY DISTRICT OF GREATER CHICAGO

TABLE 1

MEAN QUARTERLY ANALYSIS OF SLUDGE SHIPPED TO THE 103rd STREET
AND DOTY AVENUE LANDFILL CLOSURE SITE IN CHICAGO DURING 1982

	1 9 8 2			
	January * Through March	April Through June	July Through September	October Through December
Number of Samples		25	24	10
pH		7.7	7.7	7.8
	-----Percent-----			
Total Solids		30.5	40.2	38.1
Total Volatile Solids		35.8	33.5	24.8
	-----mg/dry kg-----			
N-Kjeldahl		24,900	20,200	18,500
N-NH ₃		5,600	4,600	4,900
Total P		30,400	29,500	17,800
Zn		4,723	4,804	5,515
Cd		328	256	348
Cu		1,934	1,275	1,653
Cr		3,712	2,972	2,928
Fe		39,800	37,100	32,300
Ni		388	354	344
Pb		1,380	1,148	1,258
K		1,526	1,610	1,131
Na		994	877	678
Ca		58,200	56,200	55,400
Mg		19,400	21,100	19,600
Mn		508	479	586
Al		11,100	10,900	9,200
Hg		7.47	5.16	7.10

*No shipments were made during the first quarter of 1982.

THE METROPOLITAN SANITARY DISTRICT OF GREATER CHICAGO

TABLE 2

MEAN QUARTERLY ANALYSIS OF SLUDGE SHIPPED TO THE 103rd STREET
AND DOTY AVENUE LANDFILL CLOSURE SITE IN CHICAGO DURING 1983

	1 9 8 3			
	January * Through March	April Through June	July Through September	October Through December
Number of Samples		5	21	23
pH		7.6	7.8	7.6
	-----Percent-----			
Total Solids		23.1	31.3	27.6
Total Volatile Solids		38.4	31.2	32.5
	-----mg/dry kg-----			
N-Kjeldahl		22,600	19,800	22,400
N-NH ₃		5,600	4,900	3,600
Total P		17,000	22,000	23,000
Zn		5,158	4,646	4,969
Cd		292	277	292
Cu		1,654	1,557	1,602
Cr		2,681	2,363	2,359
Fe		39,100	36,100	32,300
Ni		404	319	334
Pb		1,338	1,294	1,333
K		1,468	1,084	1,162
Na		851	667	726
Ca		46,600	58,400	63,600
Mg		13,400	20,500	24,600
Mn		385	404	388
Al		9,100	8,500	8,400
Hg		6.24	8.44	8.31

*No shipments were made during the first quarter of 1983.